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IN VITRO ANTIOXIDANT EVALUATION OF DANDELION (*TARAXACUM OFFICINALE* WEB.) WATER EXTRACTS

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Dandelion is a quite widespread medicinal plant, which is widely used as soup, salad, coffee substitute, wine and natural source of flavouring. Its choleretic, diuretic, anti-inflammatory, appetite-stimulating and laxative properties are well known. The aim of this study was to verify the antioxidant properties of lyophilized extracts derived from dandelion root and leaves. The total polyphenol, flavonoid and free SH-group contents of root and leaf extracts were determined spectrophotometrically as well as the hydrogen donating ability and reducing power property. Radical scavenging capacity of extracts was measured in H_2O_2/·OH-luminol-microperoxidase system by chemiluminometric method. The folium extract with approximately 3 times higher polyphenol (9.9 g%) and 6 times higher flavonoid content (0.086 g%) proved to be more effective as hydrogen-donor (I_{50}=160 µg), reducing agent (740 ASE mg^{-1}) and H_2O_2 scavenger (I_{50}=155 µg) compared to radix extract with lower polyphenol and flavonoid content.

Keywords: *Taraxacum officinale* Web., dandelion, antioxidant, lipid peroxidation

Taraxacum officinale Web. (Asteraceae/Compositae) is a member of the daisy family. It is a common plant in temperate climates, particularly in Western Europe, where it inhabits fields, roadsides and waste grounds (LOWELL & ROWAN, 1991). The drug is collected from both wild and cultivated plants. The main suppliers are Bulgaria, former Yugoslavia, Romania, Hungary and Poland (BISSET et al., 1994). The roots are roasted and used as a coffee substitute because of its bitter taste resembling chicory.

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